What is claimed is:

1. A control circuit for use in a video processor which combines automatic kinescope bias (AKB) control, and average individual beam current sensing and limiting in at least one CRT, comprising:

automatic kinescope bias (AKB) control circuitry for detecting a magnitude of individual red (R), green (G) and blue (B) cathode currents driving corresponding R, G and B CRTs, generating R, G and B average cathode current control signals therefrom, and using the R, G and B average cathode current control signals as feedback to the video processor to attenuate the R, G and B cathode currents approximately equal amounts; and

selective beam current limiting circuitry which compares at least one of the R, G and B average current control signals with a predetermined signal, and whereupon the at least one of the R, G and B average current control signals exceeds the predetermined signal, introducing a gain reduction in corresponding video gain stages within the video processor to limit said at least one of the R, G and B average current control signals.

2. The control circuit set forth in claim 1, wherein said gain reduction is implemented using said one of the R, G and B current control signals for DC bias control.

3. The control circuit set forth in claim 1, wherein said

1 selective beam current limiting circuitry utilizes and average

2 current control signal is derived from the current driving the blue

3 CRT.

4

5 4. A projection television system including three separate

6 cathode ray tubes (CRTs) and a video processor with a control

7 circuit including combined automatic kinescope bias (AKB) control

8 circuitry and average individual beam current sensing and limiting

9 in at least one CRT for sensing and limiting an average individual

10 beam current in each of the three separate CRTs, wherein the

11 control circuit comprises:

12 automatic kinescope bias (AKB) control circuitry for detecting

13 a magnitude of individual red (R), green (G) and blue (B) cathode

14 currents driving corresponding R, G and B CRTs, generating R, G and

15 B average cathode current control signals therefrom, and using the

16 R, G and B average cathode current control signals as feedback to

17 the video processor to reduce the R, G and B cathode currents

18 approximately equal current amounts; and

19 selective beam current limiting circuitry which compares at

20 least one of the R, G and B average current control signals with a

21 predetermined signal, and whereupon the at least of the R, G and B

22 average current control signals exceeds the predetermined signal,

23 introducing a gain reduction in corresponding video gain stages

24 within the video processor to limit said at least one of the R, G

1 and B average current control signals.

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3   5.   An automatic kinescope bias (AKB) control signal for use in a

4 projection television system which includes at least two separate

5 cathode ray tubes (CRTs) and a video processing control circuit

6 with circuitry for combined automatic kinescope bias (AKB) control,

7 and circuitry for sensing and limiting an average individual

8 cathode beam current in the at least two separate CRTs, said AKB

9 signal generated by steps including:

10   sampling an average cathode beam current provided to each of

11 the at least two CRTs and generating a corresponding cathode

12 current level signal by said sampling; and

13   utilizing each generated cathode current level signal to

14 determine an average CRT cathode beam current driving an electron

15 gun in the corresponding CRT, and generating an automatic kinescope

16 bias control signal in accordance with a magnitude of said average

17 cathode beam current for use as a feedback signal for at least one

18 of: automatic CRT cut-off stabilization and selective beam

19 limiting.

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